



Project No. 09225-06-01

June 13, 2002

Revised August 12, 2002

Mr. Ted Olson
The City of San Diego
Environmental Services Department
9601 Ridgehaven Court M.S. 1103-A
San Diego, California 92123-1636

Subject: BELT STREET PIPELINE
SAN DIEGO, CALIFORNIA
COST ESTIMATE FOR THE DEVELOPMENT OF PRELIMINARY SITE
CONCEPTUAL MODEL, AND WORK PLAN FOR SITE ASSESSMENT
ACTIVITIES

Dear Mr. Olson:

At your request, Geocon has prepared this proposal and cost estimate for the development of preliminary site conceptual model (SCM), and work plan for site assessment activities to be performed at Belt Street on the National Steel and Shipbuilding (NASSCO) facility on San Diego Bay.

BACKGROUND

It is our understanding that on February 1, 2001, an underground fuel pipeline was ruptured during a geotechnical investigation being conducted along Belt Street in San Diego, California. The pipeline was ruptured during the drilling of a soil boring by Tri-County Drilling, Inc., as directed by AMEC, a geotechnical consultant contracted by the City of San Diego. The pipeline is a Chevron Products Co. (Chevron)-owned, eight-inch diameter, steel, underground fuel pipeline containing unleaded gasoline. The pipeline is used to transport fuel between the upper and lower Chevron Products Co. Bulk Fuel Terminals. The rupture of the pipeline caused a release of approximately 2,730 gallons of unleaded gasoline to the ground and groundwater.

The site is located in the City of San Diego near the southern terminus of Sicard Street. The site is located within the NASSCO facility which is leased from the Port of San Diego. The underground product pipeline is located within a portion of Belt Street that is now located within the NASSCO facility.

Soil samples were collected February 2001 as part of the emergency response activities conducted by Chevron. and analyzed for total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd), benzene, toluene, ethylbenzene, xylenes, methyl tertiary butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA). Samples were collected from depths ranging between 5 to 11 feet below grade. Following the emergency response activities, Chevron installed a dual-purpose groundwater monitoring/vapor extraction well (NAS-1) on the NASSCO Property and used a mobile, high-vacuum dual-phase extraction unit to remove liquid and vapor phase hydrocarbons from the well. Chevron reportedly recovered approximately 1,500 gallons of hydrocarbons from this well and reduced free product thickness down to approximately 1.5 inches. At the time of our visit to the site on May 23, 2002, no measurable free product was detected in the well.

Previous site assessments have been conducted at the upper and lower Chevron Terminals. The lower Chevron Terminal received no further action status from the RWQCB in 2001.

REGIONAL SETTING

The site is located in the Chollas Hydrologic Subarea (908.22) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00). The Basin Plan indicates that beneficial uses of groundwater in this Hydrologic Area do not apply westerly of the easterly boundary of the right-of-way of Interstate 5 and that this area is exempted from the sources of drinking water policy. The site is located in this area, therefore, groundwater at the site is exempted from the sources of drinking water policy.

Groundwater at the site is at a depth of approximately 10 to 12 feet below grade and likely flows toward San Diego Bay, reported by the RWQCB to be approximately 600 feet to the southwest. In addition, underground structures, such as pipelines, and storm drains, may be potential pathways for groundwater at the site to flow into San Diego Bay.

The California Regional Water Quality Control Board (RWQCB) has established the following cleanup goals for groundwater within 1,000 feet of San Diego Bay:

Benzene	400	micrograms per liter ($\mu\text{g/l}$)
Toluene	5,000	$\mu\text{g/l}$
Ethylbenzene	430	$\mu\text{g/l}$
Xylenes	10,000	$\mu\text{g/l}$
Napthalene	2,350	$\mu\text{g/l}$
PNAs	300	$\mu\text{g/l}$

On November 13, 2001, the RWQCB issued a Directive for Groundwater Investigation Report pursuant to Water Code 132767 and has requested a preliminary SCM and a workplan to conduct a soil and groundwater investigation. This Directive was affirmed by Order No. R9-2002-0083 dated April 9, 2002.

SCOPE OF SERVICES

Task I- Preliminary Site Conceptual Model

A preliminary SCM that describes the release scenario, the geologic and hydrogeologic nature of the site, the distribution of contaminants in soil, groundwater, and soil vapor, and identifies pathways and potential receptors. The importance of the SCM is that it establishes the basis for determining the risks to potential receptors and the framework for the investigation and remedial effort to be conducted at the site. The preliminary SCM will include:

- A description of the release, and identification of the primary source;
- Abatement measures and interim corrective actions taken to date;
- Description of the site geology and hydrogeology;
- A conduit study to identify all underground utilities, construction, and natural features that may act as preferential pathways for the migration of contaminants;
- Identification of all potential receptors;
- Evaluation of all complete and incomplete pathways;
- Current and reasonably foreseeable future risk to public health; and
- Current and reasonably foreseeable future risk to ecological receptors, creeks, and surface water.

Task II - Workplan for Site Assessment Activities

A workplan for a soil and groundwater investigation will be prepared describing the proposed activities to be performed to develop the SCM. In addition to a description of the proposed investigation such as the location of borings, monitoring wells and sampling methodology, the following specific items requested by the RWQCB will be included.

- A map showing the location of all underground utilities in the vicinity of the site.
- Cross-sections showing the dimension, invert elevation, and construction details of the underground utilities described above.
- A map showing the location of all storm drains in the vicinity of the site that discharge into San Diego Bay. The map must show the location where the storm drains discharge into San Diego Bay.
- Cross-sections showing the dimensions, invert elevations, and construction details of the storm drains described above.
- A detailed history of the pipeline. This history should include the date that the pipeline was installed, repair history of the pipeline, construction details of the pipeline, and a listing of all

fuels, chemical, and other products that may have historically been transported through the ruptured pipeline.

PROPOSED FEE

Geocon proposes to perform the scope of services outlined above on a "time and materials" basis for an estimated fee of \$8,820.00. The breakdown of this fee is as follows:

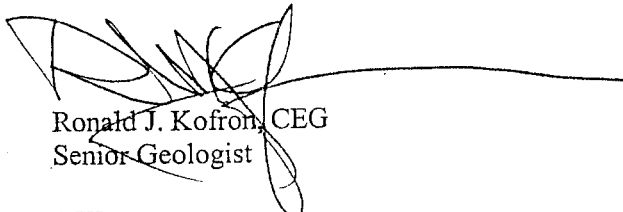
Task I	Development of Preliminary Site Conceptual Model	\$ 6,620.00
Task II	Prepare Work Plan for Soil and Groundwater Investigation	\$ 2,900.00

Upon receipt of approval of the SCM and workplan from the RWQCB, a cost estimate for the site investigation activities will be prepared and submitted to you. The fee is valid for a period of 60 days from the date of this proposal.

If this proposal meets with your approval, please acknowledge by signing below and returning a copy to us. This proposal and scope of services to be provided will be in accordance with and subject to the terms of the existing contract for environmental services between Geocon and the City of San Diego.

Sincerely,

GEOCON CONSULTANTS, INC.



Ronald J. Kofron, CEG
Senior Geologist

RJK:sc

(2) Addressee



Signature of City of San Diego

Date

August 26, 2002

Printed Name

Theodore W. Olson

Title

UST Program Manager